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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/933,316 | 08/20/2001 | Stephen C Porter | 8600-0029 | 7064 |

20855 7590 03/27/2006

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EXAMINER

SHARAREH, SHAHNAM J

| | |
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| ART UNIT | PAPER NUMBER |
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1617

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,316

Applicant(s)

PORTER, STEPHEN C

Examiner

Shahnam Sharareh

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,9-11,15-28 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) 29-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-4, 9-11, 15-28, 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's response filed on December 27, 2005 has been entered. Claims 1, 3-4, 9-11, 15-28, 38-41 are under consideration on their merits. Claims 29-37 stand withdrawn as they are not directed to the elected invention.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3-4, 9-11, 15-28, 39-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Krall et al WO 00/44287 (WO '287) in view of Ricci et al US patent 6,203,779 for the reasons of record.

3. Claims 1, 3-4, 9-11, 15-28, 38-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Krall et al in view of Ricci as applied to claims 1, 3-4, 9-11, 15-28, 39-41 and further in view of Hechenberger et al US Patent 4,997,861 for the reasons of record. .

Response to Arguments

Applicant's arguments filed December 27, 2005 have been fully considered but they are not persuasive.

4. Applicant first argues that the combined teachings of Krall and Ricci do not teach or suggest the molecular weight of the claimed polymeric rheology modifying agents. (see Remarks at page 3). In response Examiner states that the combined teachings of Krall and Ricci provides that polymeric rheology modifying agents, such as cellulose

diacetate polymers, can be combined with matrix forming alkyl cyanoacrylate monomers, because they are both readily used in embolic compositions.

The rejection states that the cellulosic polymers of Ricci have an average molecular weight of about 200,000. (see Ricci at col 5, lines 1-40; col 6, lines 56-67; col 9, lines 15-24; specially col 5, lines 33-35). Examiner views the language "about 200,000" in Ricci, to also include slightly greater than 200,000. Accordingly, the rejection has already taught all features of the instant claims.

5. Moreover, the rejection concluded that it would have been obvious to one of ordinary skill in the art at the time of invention to combine non-cyanoacrylate biocompatible polymer of Ricci and the embolic composition of Krall and further optimize the viscosity of such compositions for their own intended use by routine experimentation. Therefore, even if Ricci does not explicitly meet such limitation, the rejection has articulated that the instantly employed molecular weight was viewed as an optimizable parameter.

Examiner adds that Ricci teaches the same polymers as instantly employed. Since all such homologous polymers moieties will provide viscosity or rheology characteristics, modifying their molecular weights would have amount to a mere difference in degree. The Courts have repeatedly reasoned that mere difference in effectiveness is regarded as a mere difference in degree and not render patentable compounds rejected on structural obviousness. *Deutsche Gold-und-Sibler, etc., v. Comr. Pats*, 148 USPQ323. (DCDC 1966). Here, the difference argued by Applicant is merely a difference in degree of molecular weights of the cellulosic polymers disclosed

by Ricci, because it would optimize the rheological characteristics of an embolic composition. However, absent a showing of unexpected results modifying viscosity of such compositions by recognizing the preferred molecular weight of the ingredients would have been achieved by routine experimentation.

6. In response to applicant's argument that there is no suggestion to combine the references, Examiner states that Applicant fails to evaluate the references by what they suggest to one versed in the art rather than by their specific disclosure. Furthermore, obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, combining two polymeric moieties that are used for the same purpose is knowledge generally available to one of ordinary skill in the art.

7. Applicant then argues that Examiner's reliance on *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980) is misplaced because *Kerkhoven* pertains to a process claims and not composition claims (see Remarks at page 5). In response Examiner state that the rule relied explained in *Kerkhoven* in fact is reasoned by other courts: *In re Susi*, 58 CCPA 1074, 1079-80, 440 F.2d 442, 445, 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-21, 279 F.2d 274, 276-77, 126 USPQ 186, 188 (1960), wherein it was held prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition

which is to be used for the very same purpose. *Kerkhoven* merely described such legal conclusion in reference to a composition employed in the process claims at issue.

Accordingly, Examiner sees no reason to ignore such established rule of Patent Law.

8. Finally, Applicant argues that Ricci teaches the use of "biocompatible prepolymers" and they are not combinable with cellulose diacetate polymers which are "biocompatible polymers." (see Remarks at page 5). In response Examiner states that there is no teaching in Ricci discouraging the combination of two components, both of which can be used for the same intended use.

For reasons described above Applicant's arguments are not found persuasive and thus the rejection is maintained.

Conclusion

No claims are allowed.

9. However, Examiner states that incorporation of claim 11 and 17 into claim 1 in combination with a showing of unexpected results could advance the prosecution.

Applicant is encouraged to telephone the Examiner should any issues can be clarified.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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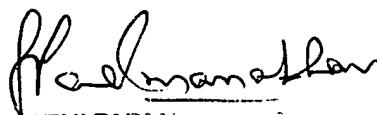
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh whose telephone number is 571-272-0630. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, PhD can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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